

Notice of Allowability

Application No.

10/052,031

Examiner

Michael P. Mooney

Applicant(s)

TAYLOR ET AL.

Art Unit

2877



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 3/15/04 Amdt.
2. ☒ The allowed claim(s) is/are 1,3-18,20 and 21.
3. ☒ The drawings filed on 18 March 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

The prior art, either alone or in combination, does not disclose or render obvious a tunable electrooptic add-drop filter including a polarization converter connected to each of said waveguides after said first beam splitter wherein each said polarization converter includes more than one set of spaced apart spatially periodic, strain-inducing pads wherein the length of said polarization converter is given by:

$$L_{\text{tot}} = N_c L_1 + (N_c - 1) L_2$$

where:

N_c = an integral number of polarization coupling regions of length L_1 and

L_2 = longer regions between said polarization coupling regions in which

polarization coupling does not occur in combination with the rest of claim 1 for the reasons argued by applicant in the Remarks in the Amendment filed on 3/15/04.

It is noted that the claim 1 is allowable because the unique combination of each and every specific element stated in the claim.

The prior art, either alone or in combination, does not disclose or render obvious a tunable electrooptic add-drop filter including a polarization converter connected to each of said waveguides a polarization converter connected to each of said waveguides wherein the polarization converter includes more than one set of spaced apart spatially periodic, strain-inducing pads; electrodes on the substrate in proximity to each

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polarization converter; and a reflector connected to the waveguides after the polarization converter in combination with the rest of claim 10.

It is noted that the claim 10 is allowable because the unique combination of each and every specific element stated in the claim.

The following is an examiner's statement of reasons for allowance:

The prior art, either alone or in combination, does not disclose or render obvious a tunable electrooptic add-drop filter method including the steps of

connecting a polarization converter to said waveguides after said first beam splitter wherein said polarization converter is conformed to include more than one set of spaced apart spatially periodic, strain-inducing pads wherein the length of said polarization converter is given by:

$$L_{tot} = N_c L_1 + (N_c - 1) L_2$$

where:

N_c = an integral number of polarization coupling regions of length L_1 and

L_2 = longer regions between said polarization coupling regions in which

polarization coupling does not occur in combination with the rest of claim 18 for the reasons argued by applicant in the Remarks in the Amendment filed on 3/15/04.

It is noted that the claim 18 is allowable because the unique combination of each and every specific element stated in the claim.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Mooney whose telephone number is 571-272-2422. The examiner can normally be reached during weekdays, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on 571-272-2415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-

1562.


Michael P. Mooney
Examiner
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Frank G. Font
Supervisory Patent Examiner
Art Unit 2877

FGF/mpm
5/17/04